

validation. Further research about the value and accuracy of existing instruments in clinical practice is required.

PSY25

MODELLING THE LIKELY IMPACT OF THE OBESITY EPIDEMIC ON MORTALITY AND CAUSE OF DEATH IN OLDER ADULTS

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OBJECTIVES: The UK population is ageing, and the prevalence of obesity is increasing. To assess the likely impact of these two demographic trends, we used a stochastic all-cause, cause of death mortality model to determine changes in likely age of death associated with different body mass index (BMI) values in older adults. **METHODS:** The Sonata Vivo model adjusts population baseline mortality for known risk factors to calculate the mean age of death and most likely causes of death for an individual, and has been validated against long-term cohorts in the UK and USA. We used the model to calculate the difference in mean ages of death at BMIs of 27, 33, 37 and 42 compared with a BMI of 22 in men and women aged 55 to 90. We assumed all subjects were non-smokers with population average values for blood pressure, cholesterol and alcohol consumption. **RESULTS:** In adults aged 55 years at baseline, increasing BMI from 22 to 42 was associated with a decrease in mean age of death of 1.93 years in women and 1.89 years in men. The absolute difference in life expectancy across the BMI range decreased with increasing age at baseline, to 0.34 years in women and 0.15 years in men aged 90. As expected, the model predicts a longer life expectancy in women than men at each age and BMI, but the relative difference between genders was smaller in those with a BMI of 42 than in those with a BMI of 22. Analysis by likely cause of death in 55 year old adults showed the main impact of obesity was on cardiovascular (CVD) and cancer deaths in women, and CVD and endocrine deaths in men. **CONCLUSIONS:** Obesity is likely to reduce life expectancy by up to 2 years in older adults in the UK, mainly from increased CVD mortality.

SYSTEMIC DISORDERS/CONDITIONS – Cost Studies

PSY26

A FIVE YEARS BUDGET IMPACT ANALYSIS OF THE INTRODUCTION OF ADALIMUMAB FOR CROHN'S DISEASE PATIENTS FROM THE PERSPECTIVE OF THE BRAZILIAN PRIVATE HEALTH CARE SYSTEM

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OBJECTIVES: The aim of this study was to evaluate the Budget Impact (BI) of treatment of Crohn's disease with adalimumab (ADA) from the perspective of the Brazilian Private Health Care System (BPHCS) over a 5 year time period. **METHODS:** An epidemiological model based on the Private Health Care System population, DataSUS database and published literature was developed to estimate eligible patients in the next five years. The BI was simulated comparing the current scenario (patients treated with intravenous infliximab (IFX)) with a new scenario (the introduction of ADA for Crohn's disease treatment), BPHCS perspective. The market-share for ADA starts at 20% during the first year and rises to 80%. Dose per application, number of vial/syringe, cost of application and median of weight were based on scientific literature. The drug prices were based on Factory Prices plus 18% taxes from CMED. A deterministic sensitivity analysis (DSA) was performed to determinate the impacts in results. **RESULTS:** 10,035 patients were eligible for treatment with either IFX or ADA over the five years of analysis. In the base case scenario, the Budget Impact simulation presented a decrease of total cost by R\$1,942,434.38 in the first year and reached a decrease of R\$9,089,493.93 in the fifth year. The cumulative economic savings for the five years in the simulation with ADA introduction was R\$26,879,457.87. In deterministic sensitivity analysis cost per vial of IFX, cost per syringe of ADA and market-share of patients were the most important variables that impacted results. A majority of DSA scenarios indicated that treatment with ADA provides cost savings. **CONCLUSIONS:** The utilization of ADA may generate economic savings for the Brazilian Private Health Care System that may allow more eligible patients with Crohn's disease to be treated with ADA.

PSY27

BUDGET IMPACT ANALYSIS OF BLOOD CLOTTING FACTOR CONCENTRATES IN THE TREATMENT OF VON WILLEBRAND DISEASE

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OBJECTIVES: To conduct a budget impact analysis of treatment and prophylaxis of acute bleedings among patients with von Willebrand disease using blood clotting factor concentrates (clotting factor VIII + von Willebrand factor) in the Russian Federation. **METHODS:** Clinical effectiveness assessment was based on the results of modeling of the treatment and prophylaxis of patients with von Willebrand disease using blood clotting factor concentrates (clotting factor VIII + von Willebrand factor) within one year (time horizon). The required data was obtained from literature review within PubMed and E-library, and from experts in hematological healthcare centers in Russia. Cost analysis included assessment of direct and indirect costs that can be associated with analyzed schemes of treatment ("No prophylaxis", "Prophylaxis 1" – median purity concentrate VWF:RCo/FVIII=0.5/1, "Prophylaxis 12" – high purity concentrate VWF:RCo/FVIII=2.5/1, "Prophylaxis 13" – high purity concentrate VWF:RCo/FVIII=0.9/1). Cost data was based on median prices for medicines and medical services in National healthcare system in the Russian Federation. **RESULTS:** In case of switching from regimens: "No prophylaxis", "Prophylaxis 1", "Prophylaxis 12", to the regular preventive administration with the scheme "Prophylaxis 13" total costs per all population within one year can be reduced by 21906000 rubles (\$ 396 360), 22143000 rubles (\$ 400 648) and 5752000 rubles (\$ 104 075), respectively. **CONCLUSIONS:** Obtained results demonstrates that the use of high purity concentrate VWF:RCo/FVIII=0.9/1

in treatment and prophylaxis of patients with von Willebrand disease is approved from a pharmacoeconomic point of view.

PSY28

BUDGET IMPACT ANALYSIS OF DASATYINIB IN TREATMENT OF ADULT PATIENTS WITH PHILADELPHIA CHROMOSOME POSITIVE (PH+) ACUTE LYMPHOBLASTIC LEUKEMIA (ALL) WITH RESISTANCE OR INTOLERANCE TO PRIOR THERAPY IN POLAND

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OBJECTIVES: The purpose was to estimate the financial consequences of reimbursement of dasatinib in adult population with Ph+ ALL with resistance or intolerance to prior therapy in Poland. **METHODS:** The budget impact model was developed to evaluate the consequence for National Health Fund budget in Poland in case of reimbursement of dasatinib. Two scenarios were considered: with and without dasatinib reimbursement in two-years' time horizon (2015-2016). In scenario with reimbursement, dasatinib would be used instead the FLAM chemotherapy (fludarabine, cytarabine, mitoxantrone). Based on the Polish epidemiological data the target population – adult patients Ph+ ALL with resistance or intolerance to prior therapy – was estimated at 12 patients in one year (with range from 5 to 24). Direct medical costs: substances and their administration (assessed chemotherapies), monitoring, allogeneic hematopoietic stem cell transplantation (allo-HSCT), monitoring after allo-HSCT and palliative care were considered. All calculations were performed with the Excel model constructed for economic evaluation and budget impact assessment. **RESULTS:** If the reimbursement of dasatinib is introduced, the annual expenses from the budget of National Health Fund in Poland would increase by €127,279 in the first year and €189,224 in the second year of reimbursement. However, change from FLAM to dasatinib will decrease the necessity and length of hospitalization due to the different administration route. **CONCLUSIONS:** Reimbursement of dasatinib in Poland will bring additional costs incurred by public payer, however, it will also increase the survival of patients with ultra-rare disease which is ALL and consequently improve their quality of life.

PSY29

BUDGET IMPACT ANALYSIS OF CANAKINUMAB IN THE TREATMENT OF PATIENTS WITH MUCKLE-WELLS SYNDROME IN THE RUSSIAN FEDERATION

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OBJECTIVES: To conduct budget impact analysis (BIA) of canakinumab treatment group comparing to symptomatic treatment in retrospective group of patients suffering from Muckle-Wells Syndrome (MWS). **METHODS:** BIA was conducted of the canakinumab treatment group versus retrospective group with only symptomatic treatment. According to the expert opinion canakinumab treatment accompanied by vial sharing and it has been taken into consideration of drug cost therapy. Following direct medical costs were also included into analysis and based on expert opinion: administration costs, costs of diagnostic laboratory and instrumental procedure, costs of inpatient and outpatient visits, costs of treating MWS complications and costs for correction adverse events. One-year time horizon was used. **RESULTS:** Cost of canakinumab therapy course was 40,830,937 RUB/ 668,220 EUR for 20 MWS patients within 1 year. The difference in the required budget funds between canakinumab treatment group and retrospective group with symptomatic treatment was 38,787,076 RUB/ 634,771 EUR for 20 patients within 1 year. Decrease of direct medical costs (excluding costs for drug therapy) was obtained in canakinumab treatment group and amounted 763,705 RUB/ 12,498 EUR for 20 patients within 1 year due to a lower frequency of inpatient and outpatient visits, complications of MWS and lower administration costs in group treated with canakinumab. **CONCLUSIONS:** Usage of canakinumab in the treatment of patients with MWS led to budget spending. However, good efficacy of canakinumab helped to reduce direct medical costs for 763,705 RUB/12,498 EUR for 20 patients within 1 year in canakinumab treatment group.

PSY30

BIOLOGIC TREATMENTS FOR MODERATE TO SEVERE NAÏVE PSORIATIC PATIENTS: A BUDGET IMPACT ANALYSIS IN ITALY

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OBJECTIVES: Evaluate the current prescription trend in Italy and estimate the impact of alternative market hypothesis including the introduction of infliximab biosimilars. **METHODS:** Biologics currently indicated for psoriasis include tumor necrosis factor (TNF)- α inhibitors adalimumab, etanercept, and infliximab, as well as the interleukin-12/23 inhibitor ustekinumab. A deterministic Markov model was developed to simulate the evolution of bio-naïve psoriatic patients in Italy for 3 years. Event rates (mortality, malignancies, infections and MACs) and persistence curves, were modeled for each biologic drug used in first, second and third line, basing on published data. Hospitalization costs were calculated as average of Italian DRGs weighted for event-related frequency. The cost of a dermatological visit was considered every two months and in case of therapy switch. All costs were calculated from the perspective of NHS. The current Italian market mix of biologic treatments was compared with the total substitution of infliximab with its biosimilars combined with ustekinumab increasing its market share to 40% at the expenses of the remaining biologics, proportionally to their current shares. **RESULTS:** In the next three years, 515 bio-naïve patients are expected to start a new biological treatment annually. Total cost results in about 45.7 million Euro for 3 years in the current scenario corresponding to 15,148 Euro/patient yearly. Increasing in ustekinumab market shares and the introduction of infliximab biosimilars lead to estimated annual savings of about 670 Euro/patient (1.7 million Euro in 3 years). Cost of biologic therapy is the main driver, while dermatological visits and adverse events management represent less than 1% of the total cost. **CONCLUSIONS:** Biological treatment cost of psoriasis depends almost completely from pharmacological therapy. Changes in the current prescription